## Light-Pak N2LPS LED emergency lighting system

Cl. I, Div. 2, Groups B, C, D Cl. I, Zone 2 Cl. II, Div. 2, Groups F, G Marine & Wet Locations NEMA 3, 3R, 4X

#### Applications:

Light-Pak™ N2LPS LED emergency lighting systems are used:

- To provide reliable illumination for egress areas during failure or interruption of power to the normal lighting system
- In areas where flammable gases or vapors may become present due to abnormal, unusual or accidental conditions
- In manufacturing plants, refineries, petrochemical and chemical plants, waste and sewage treatment facilities, oil terminals, food processing facilities, breweries and other industrial manufacturing or process industry facilities subject to wet or corrosive conditions
- To illuminate machinery or panels during a loss of AC power
- Where moisture, dirt, dust or corrosion will limit the life and reliability of ordinary emergency lighting systems
- Where required by the National Electrical Code®, the Life Safety Code® or other applicable codes
- · Outdoor applications

#### Features:

- Compact, factory assembled luminaire featuring LED lamps for improved lumen performance, on-time and lamp life
- Non-metallic, enclosed and gasketed housing provides corrosion protection in the most extreme environments
- Durable and marine rated LED lamp head assemblies provide protection against water ingress, corrosion and impact
- High temperature rated nickel cadmium battery for reliable operation up to 55°C ambient
- Solid-state battery charger for long life and reliable battery operation prevents deep discharge by automatically disconnecting the battery from the luminaire
- Factory installed "push-to-test" button
- Self-test, monitoring and diagnostics reduce costly maintenance checks
- Remote luminaire head assemblies (one or two) are available for mounting of luminaire heads away from main power system
- Stainless steel drain minimizes moisture collection
- Standard battery disconnect switch (Krydon unit)

### Certifications and compliances:

#### NEC/CEC:

• Class I, Division 2, Groups B, C, D, Zone 2

#### **UL** standards:

- UL1598A Supplemental Requirements for Luminaires for Installation on Marine Vessels
- UL924 Emergency Lighting and Power Equipment
- UL844 Electric Luminaires Hazardous Locations

#### CSA standards:

- C22.2 No. 141-M1985 Unit Equipment for Emergency Lighting
- C22.2 No. 137-M1981 Non-incendive Electrical Equipment for use in Class I, Division 2 Hazardous Locations
- Life Safety Code NFPA101 Section 5-9 (Emergency Lighting)
- Marine wet locations suitability, Type 4X

#### Standard materials:

- Power supply and remote luminaire enclosures – Krydon fiberglass-reinforced polyester
- LED lamp head assembly epoxy powder coated stainless steel
- Exterior hardware nylon, plastic coated, and stainless steel
- Cover gasket Hypalon® synthetic rubber

## Temperature performance data:

#### (Based on 55°C ambient)

Class I, Division 2	Class II, Division 1
40°C - T5; 55°C - T4A	T6
T5	T6
	<b>Division 2</b> 40°C – T5; 55°C – T4A

**Note:** Ambient temperature at which the Light-Pak system is rated is 0°C to 56°C. Operation at temperatures outside this range will affect the battery life and/or charging performance.

Note: Battery time in emergency mode is 90 minutes.



#### **Electrical ratings:**

· Power supply:

Input – 120, 220, 230, 240 or 277 VAC, 50 or 60 Hz; 9W max.

Output - 18W max. at 12 VDC

Luminaire heads:

Voltage – 12 VDC; lamp: 3W LED Total lumen output – 80

#### **Photometrics:**

 Complete photometrics can be found at www.crouse-hinds.com/photometrics

#### Weights:

- N2LPS12222 16 lbs.
- N2LPS12220 12 lbs.
- N2RF1221 8 lbs.
- N2RF1222 9 lbs.

#### Options:

Description	Suffix
<ul> <li>55°C suitability</li> </ul>	S904



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### **Ordering information:**

Description	Cat. #
18W, 12V power supply assembly with two 3W LED lamp heads	N2LPS12222
18W, 12V stainless steel power supply assembly with two 3W LED lamp heads	N2LPS12222 SS
_18W, 12V power supply assembly less luminaire heads	N2LPS12220 <b>3</b>
Remote luminaire assembly with one 3W LED lamp head	N2RF1221 <b>3</b>
Remote luminaire assembly with two 3W LED lamp heads	N2RF1222 <b>9</b>
_18W, 120V LED Light-Pak with single sided exit sign  ■	N2LPS12222/120 EXS DR03917346
18W, 277V LED Light-Pak with single sided exit sign <b>®</b>	N2LPS12222/277 EXS DR03917346
18W, 120V LED Light-Pak with double sided exit sign 4	N2LPS12222/120 EXD DR0391734®
18W, 277V LED Light-Pak with double sided exit sign 4	N2LPS12222/277 EXD DR0391734 3

Note: Up to four remote LED lamp assemblies can be connected to the N2LPS12222. Up to six remote LED lamp assemblies can be connected to the N2LPS12220.

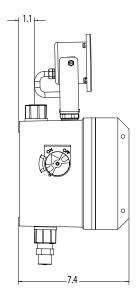
#### Wire sizing for remote installation:

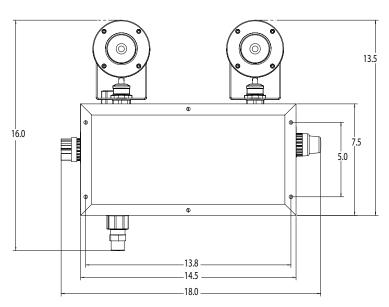
#### For copper wire -

Running distance (ft.) between power supply and remote luminaire

Wire	Load in	Load in watts			Wire	Load in v	Load in watts			
size	8	16	24	32	size	8	16	24	32	
16 AWG	26	13	6	3	10 AWG	106	53	26	13	
14 AWG	42	21	10	5	8 AWG	168	84	42	21	
12 AWG	66	33	16	8	6 AWG	270	135	67	33	

#### **Dimensions - N2LPS:**





Standard - N2LPS LED Light-Pak

A Exit sign operates in both normal and emergency mode

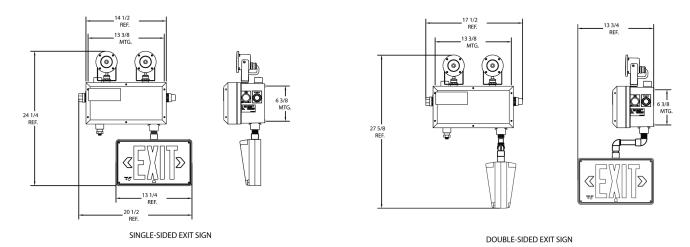
BNot UL or cUL approved.

Maximum distance to limit line voltage drop to 5%.

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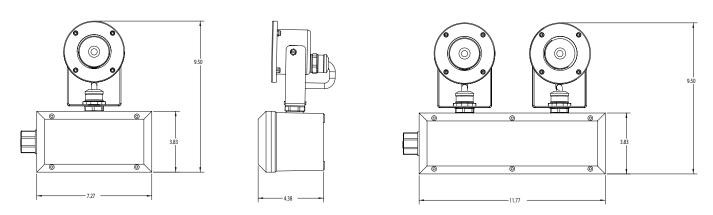
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### **Dimensions - N2LPS (continued):**



EXS, EXD option - N2LPS LED Light-Pak with optional emergency exit luminaire

#### **Dimensions - N2RF:**



### **Detail indication logic:**

Status indication	Status description	Status definition
	No light	AC power removed from circuit
*	Steady light (no blinks)	Fully charged
*_*	Light blinks once	Battery charging
**_**	Light blinks twice	Battery failure
***_**	Light blinks three times	Circuit failure